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2 **CLAIMS:**

3 What is claimed is:

1 1. A method for updating software on a data processing  
2 system having a root device and a back-off device which  
3 is a mirror of the root device, the method comprising:  
4 executing a preparation function on the data  
5 processing system;  
6 responsive to a determination that the preparation  
7 function completed successfully, breaking a root  
8 mirroring function of the data processing system such  
9 that changes to the root device do not affect the back-  
10 off device;  
11 upgrading the root device of the data processing  
12 system; and  
13 responsive to a determination that the upgrading the  
14 root device of the data processing system was  
15 unsuccessful, recovering an original state of the root  
16 device using the back-off device.

1 2. The method as recited in claim 1, further  
2 comprising:  
3 responsive to a determination that the upgrading the  
4 root partition of the data processing system was  
5 successful, remirroring the root device such that the  
6 root device and the back-off device are substantially  
7 identical.

1 3. The method as recited in claim 1, further  
2 comprising:

3 prior to upgrading the root device, determining  
4 whether the data processing system can boot from the  
5 back-off device; and

6 responsive to a determination that the data  
7 processing system cannot boot from the back-off device,  
8 determining a reason for the inability of the data  
9 processing system to boot from the back-off device.

1 4. The method as recited in claim 1, wherein the  
2 preparation function comprises:

3 presenting a user with at least one configuration  
4 question; and

5 storing a response to the at least one configuration  
6 question as configuration data.

1 5. The method as recited in claim 1, wherein  
2 remirroring the root device such that the root device and  
3 the back-off device are substantially identical  
4 comprises:

5 setting a volume manager to use plexes on the back-  
6 off device as source plexes of volumes; and

7 rebooting the data processing system using the back-  
8 off device.

1 6. The method as recited in claim 5, further  
2 comprising:

3        overlaying data in the managed file systems on the  
4 root device using data from the back-off device

1    7.    The method as recited in claim 1, wherein the data  
2 processing system is a server.

1    8.    A computer program product in a computer readable  
2 media for use in a data processing system for updating  
3 software on a data processing system having a root device  
4 and a back-off device which is a mirror of the root  
5 device, the computer program product comprising:  
6        first instructions for executing a preparation  
7 function on the data processing system;  
8        second instructions for breaking a root mirroring  
9 function of the data processing system such that changes  
10 to the root device do not affect the back-off device if  
11 the preparation function completed successfully;;  
12        third instructions for upgrading the root device of  
13 the data processing system; and  
14        fourth instructions for recovering an original state  
15 of the root device using the back-off device if the  
16 upgrading the root device of the data processing system  
17 was unsuccessful.

1    9.    The computer program product as recited in claim 8,  
2 further comprising:  
3        fifth instructions for remirroring the root device  
4 such that the root device and the back-off device are

5 substantially identical if the upgrading the root  
6 partition of the data processing system was successful.

1 10. The computer program product as recited in claim 8,  
2 further comprising:

3 fifth instructions for determining, prior to  
4 upgrading the root device, whether the data processing  
5 system can boot from the back-off device; and

6 sixth instructions for determining a reason for the  
7 inability of the data processing system to boot from the  
8 back-off device if the data processing system cannot boot  
9 from the back-off device.

1 11. The computer program product as recited in claim 8,  
2 wherein the preparation function comprises:

3 fifth instructions for presenting a user with at  
4 least one configuration question; and

5 sixth instructions for storing a response to the at  
6 least one configuration question as configuration data.

1 12. The computer program product as recited in claim 8,  
2 wherein remirroring the root device such that the root  
3 device and the back-off device are substantially  
4 identical comprises:

5 fifth instructions for setting a volume manager to  
6 use plexes on the back-off device as source plexes of  
7 volumes; and

8 sixth instructions for rebooting the data processing  
9 system using the back-off device.

1 13. The computer program product as recited in claim 12,  
2 further comprising:

3 seventh instructions for overlaying data in the  
4 managed file systems on the root device using data from  
5 the back-off device

1 14. The computer program product as recited in claim 8,  
2 wherein the data processing system is a server.

1 15. A system for updating software on a data processing  
2 system having a root device and a back-off device which  
3 is a mirror of the root device, the system comprising:

4 first means for executing a preparation function on  
5 the data processing system;

6 second means for breaking a root mirroring function  
7 of the data processing system such that changes to the  
8 root device do not affect the back-off device if the  
9 preparation function completed successfully,;

10 third means for upgrading the root device of the  
11 data processing system; and

12 fourth means for recovering an original state of the  
13 root device using the back-off device if the upgrading  
14 the root device of the data processing system was  
15 unsuccessful.

1 16. The system as recited in claim 15, further  
2 comprising:

3 fifth means for remirroring the root device such  
4 that the root device and the back-off device are

5 substantially identical if the upgrading the root  
6 partition of the data processing system was successful.

1 17. The system as recited in claim 15, further  
2 comprising:

3 fifth means for determining, prior to upgrading the  
4 root device, whether the data processing system can boot  
5 from the back-off device; and

6 sixth means for determining a reason for the  
7 inability of the data processing system to boot from the  
8 back-off device if the data processing system cannot boot  
9 from the back-off device.

1 18. The system as recited in claim 15, wherein the  
2 preparation function comprises:

3 fifth means for presenting a user with at least one  
4 configuration question; and

5 sixth means for storing a response to the at least  
6 one configuration question as configuration data.

1 19. The system as recited in claim 15, wherein  
2 remirroring the root device such that the root device and  
3 the back-off device are substantially identical  
4 comprises:

5 fifth means for setting a volume manager to use  
6 plexes on the back-off device as source plexes of  
7 volumes; and

8 sixth means for rebooting the data processing system  
9 using the back-off device.

1 20. The system as recited in claim 19, further  
2 comprising:  
3 seventh means for overlaying data in the managed  
4 file systems on the root device using data from the back-  
5 off device

1 21. The system as recited in claim 15, wherein the data  
2 processing system is a server.